

## Energy Security or a New Globalization of Conflicts? Oil and Gas in Evolving New Power Structures

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### Introduction: The Strategic Perspective

Secure energy supply is an essential for industrial societies. Recognizing the very criticality of this condition tends to get caught between alarmism and complacency. Even more, “there is a tendency in our planning to confuse the unfamiliar with the improbable . . . The danger is in a poverty of expectations—a routine obsession with a few dangers that may be familiar rather than likely.”

It was one of the most influential nuclear strategists, Tom Schelling, who observed this in his introduction to the Roberta Wohlstetter classic on the Pearl Harbor attack. And lessons for this conference’s main theme can indeed be drawn from the Pearl Harbor experience—both from Japan’s fear to get strangled through energy cut-offs and from the strategic surprise to the United States, even though the United States had all the needed intelligence somewhere. What was missing was a strategic posture that allowed it to integrate discomforting data into a picture commensurate with the emerging threat. However, history is not rich with cases where the victim of attack was prepared to respond without the jeopardizing effects of surprise: Barbarossa, Hitler’s attack on France, the Cuban missile crisis, and more recently, 9/11, are all repeats of the Pearl Harbor experience.

In retrospect, it is astonishing that throughout the Cold War (except for repeated quarrels over Iran as took place in 1951, 1973 and 1979), secure energy supply hardly ever has become a primary issue. The dual control of suppression of local and regional crisis potentials in areas like the Gulf, and of access of the global competitors to respective claimed energy resources, prevented the perennial competition from seriously becoming intermingled with energy supply. In fact, Soviet supplies to contested Germany increased well before the end of the Cold War.

There were two main reasons for that. One was the increasingly stabilizing nuclear deterrence regime that had emerged from the post-war disorder after 1945, and which enabled a successful transition from the most threatening strategic environment in history to a process of peaceful change. The other was the functioning of global economic institutions reinforced by a demand-driven energy supply system—at least for oil—i.e., OPEC.

Like after 1945, a thorough reordering of global power structures is now in the making. In fact, the transition after 1989/90 was still under way when Saddam Hussein was reaching out to the oil

riches in the Upper Gulf in an attempt to change profoundly the relations between the industrialized and the developing world. However, after 1945 the concept of “One World” was replaced by a nearly global division of power and influence that lasted for roughly four decades. The concept of a new “global order” that was meant to become the organizing concept for the post-Cold War world, rapidly lost its original meaning amidst the turmoil of various concurrent developments.

Global energy supply is both profoundly affected by this state of international disorder and is itself a driving factor in exacerbating international competitiveness. For decades the United States was a born guarantor of secure energy supply among the industrialized nations regulated through customer-oriented international institutions which helped establishing a global market for oil that also helped regulating the supply of gas. In recent years we have gone through a major reversal of this basic situation:

- The United States has become heavily dependent on energy imports.
- There no longer is a customer-oriented market mechanism.
- Major powers compete for long-term secure energy supplies.
- The industrial countries no longer share a common approach.
- They also need to compete with the BRIC states (i.e., Brazil, Russia, India and China) or else are susceptible to manipulations on the part of major producers.
- Countries like the GCC states, on top Saudi Arabia, which feel insecure capitalize on the U.S. interest to protect them while also cooperating on energy strategy and other delicate issues with U.S. opponents.

Secure energy supply has become a secular problem on the international agenda. However, policy debates are so far primarily focused on resources, demands and energy mixes that can serve to meet the demands. In addition, the implications for climate change are increasingly recognized. No global or regional approaches have been developed, let alone agreed upon towards the economic and security dimensions of the overall energy future than can be envisaged at this stage. In fact, energy security is still widely considered as a national prerogative.

This article will address energy security in global perspective. In varying degrees disruptive actions like piracy, terrorism, insurgency and coercive diplomacy get attention—after the event. These are serious challenges that deserve more analysis, investments and efforts. In key countries like the United States and, more modestly, within the GCC states and the European Union programs have been initiated to mitigate these risks and uncertainties. However, these challenges need to be addressed within a much broader context. The challenges change their criticality, depending on:

- the vulnerabilities of the supply chain and the requirements for complex disruptive actions,
- the changing trading patterns for oil and gas and their respective strategic implications,
- the geopolitical risks, i.e. both adverse geopolitical changes and actual or potential state level conflicts with a critical energy dimension.

Changing trade patterns and strategic environments require scenario-based approaches with mid- to long-term perspectives. After all, Shell introduced scenario-based analysis and planning after the 1973 oil shock. Today the global oil market is disintegrating and long-term energy supply strategies mostly follow current political preferences with respective dependencies (like the German Russian-first policy). Reorientations tend to be difficult, if only in view of expensive infrastructures. The dominant strategies are thus shaped by regional circumstances and short- to mid-term expectations.

In search of a conceptual framework in pursuit of future energy security three interrelated levels need to be distinguished:

- Vulnerabilities of the oil and gas supply from drilling to refining
- Changing trade patterns for oil and gas
- Changing strategic/geopolitical environments for oil and gas supply.

## **Vulnerability of Existing Oil and Gas Supply Systems to intended Disruptions**

Within given global and regional supply structures and below the level of military conflict, supply chains are increasingly threatened by terrorism, insurgency, piracy, and sabotage along with neglect, incompetence, etc. Terrorist and insurgent attacks on oil and gas supply facilities are in the current focus of attention.

All segments of oil and gas supply systems from oil wells to the pumping stations and the entire pipeline network and sea transport lanes to terminals, tanks, and refineries can be targeted and need to be protected. Global and competitive demands, transportation, and their strategic implications have rendered energy security a global security requirement.

However, in assessing these risks it is important to make two distinctions:

- Vulnerability tends to be understood in terms of its technical susceptibility and weaknesses. This condition can be mitigated to a degree, but never eliminated. Given that, it is important to understand why there have not been more and more varied catastrophes so far. One factor is increasing protection, but that often can be bypassed. More importantly, attacks and in particular larger-scale attacks are guided by targeting policies and strategic objectives. In this perspective vulnerability needs to be understood in terms of intended consequences, in particular cascading and secondary effects with political impact. This vulnerability would not work without technical vulnerabilities, but the likelihood of major attacks, the selection of targets and the chances for disruptive damage come with the political rationale for the attacks.
- Below the level of military conflict rather different types of attack are possible and do happen: sabotage, piracy, incidental terrorism, insurgency, terrorist campaigns, and strategic terrorism that aim at major enduring and strategic changes.

Producer states without economic diversification tend to be more vulnerable than states with increasing economic diversification, even if their political conditions are relatively stable. Reserves and substitutions would help to match drastic cut-offs of exports in a major producer state.

For industrial countries in North America, Europe, and Asia the long-range transport through pipelines or shipments is the most endangered segment:

- 40 mio. barrels of oil are daily at sea.
- Within up to 15 years this tends to go up to 70 mio. barrels.
- LNG shipments are likely to triple over the next ten years or so.
- Today 25 percent of the global oil requirement flow daily through the Strait of Hormuz (with its two 3 km-wide channels), i.e., 88 percent of the oil exported from the Gulf. According to the IEA, 16 to 17 mio. barrels exit daily through these narrow channels. 20 to 30 tankers cross the Strait every day, at times one every six minutes.
- There exist plans to bypass the Hormuz bottleneck by trans-Arabian pipeline systems. But already today 40 percent of oil globally flows through long pipelines, and avoiding the Hormuz risks may increase the exposure of the vulnerable pipeline network.
- Obviously other choke-points, on top the Strait of Malacca, add to this very serious vulnerability of the oil and gas transportation system.

Producing countries like Russia as well as major customers seek to avoid critical dependencies through the choice of routes, e.g., through reliable transit states, to render competing routes less attractive or to bypass critical choke-points. Recent examples have received political attention. The critical issue will increasingly be whether usable flexibility can be designed so as to reduce the overall vulnerabilities of the supply system.

The expanding system does offer increasing redundancy and thus flexibility and to an extent resilience. In fact, resilience is likely to ensure sustainability unless other coercive measures, i.e., military attacks, come into play.

The case of Iraq is special in that it is a war-torn country, and political objectives of terrorism are clearly defined in regard to allied occupation. However, even after a withdrawal, sectarian and tribal conflicts as well as renewed quarrels over the distribution of oil revenues among the Iraqi factions may continue.

In Iraq as the most exposed country the oil sector remained relatively safe until mid-2003: neither during the Iran-Iraq War nor the Iraqi invasion of Kuwait and Desert Storm did the Iraqi oil sector suffer from attacks and sabotage. From mid-2003 to early 2007, the Iraqi oil sector has suffered more than 400 attacks—at times one attack a day. More than 280 attacks were directed against oil and gas pipelines to both disable and to prevent repair. While oil and gas pipelines are the most vulnerable part of the supply chains, the attacks hit almost every segment of the Iraqi oil industry infrastructure.

In less disabled producer countries—Saudi Arabia is a case in point—damage and political impacts can still be considerable. The same is true for customer countries. But resilience is likely to ensure sustainability unless other coercive measures, i.p., military attacks, come into play. However, while both World War II as well as allied bombing campaigns in Iraq and former Yugoslavia suggest that even in view of secondary and cascading effects, major terrorist campaigns can hurt severely, they are far from likely to bring down a fairly developed political structure. The economic *jihad* is a challenge with serious potential consequences, but by itself it is not going to jeopardize global structures. It could, however, exacerbate global competitions over energy security. However, while terrorism is unlikely to lead to military conflicts between global competitors, competitions over securing energy possibly could.

## The Strategic Impact of Changing Trading Patterns for Oil and Gas

More than anything, nationalization and dominant state control of reserves, investments, infrastructures, prices and supplies have dramatically changed traditional trading patterns:

- 80 to 85 percent of oil, and 60 to 70 percent of gas, reserves are controlled by state governments or state-controlled enterprises.
- The oil market is increasingly driven by suppliers rather than customers.
- A large portion comes from states which operate outside OECD- and WTO-rules.
- The global oil market is no longer governed by market mechanisms, i.p. for these reasons:
  - concentration in the Middle East (i.p. Saudi Arabia);
  - OPEC countries have discovered their coercive potential;
  - investment policies by producing and reserve states are increasingly driven by national assertive, if not aggressive, interests and policies.
  - No integrated gas market exists, and between the three major supply areas there is little overlap: Europe (from RF and Algeria), East Asia and United States (primarily from Canada).
  - Forthcoming tripling of LNG and expected Northeastern passages will change this pattern in the direction of increasing interregional and intercontinental supply.

- So may the emergence of partly intercontinental producer coalitions for both oil and gas, i.p.:
  - The SOC, i.e., the so-called Shanghai Organization for Cooperation, with Russia, China, Kazakhstan, Uzbekistan, Kyrgyzstan, Tajikistan and, as an observer, Iran which is designed to move the United States out of Central Asia (Caspian Sea), and which is now turning into a military organization (first joint maneuver “Peace Mission” in August 2007 with 6,500 soldiers including 1,500 Chinese, plus fighter aircraft and helicopters).
  - The Gas-OPEC with Russia, Iran and Algeria as potential founding members. It is still facing reluctance on the part of Qatar and the need for developing Iranian gas fields (depending on U.S. relaxation and foreign investments, only 20 percent so far developed).
  - The “Bolivarian Group”, i.e., the Venezuela-initiated coalition in Latin America including Bolivia, Ecuador, Nicaragua, with growing links to Argentina and Mexico and close ties to Iran, Russia (Russia supplies armaments to Venezuela), and China.
  - SOC aims at reducing U.S. leverage, whereas the Gas-OPEC would generate a massive non-cooperative, if not aggressive, Russia-led potential vis-à-vis Europe and the Bolivarian Group in challenging the United States on the continent (even with some military back-up), even though Venezuela is still primarily selling to the United States.
- This is mirror-imaging established U.S. strategic policies, but while the United States tends to reduce dependencies on energy imports and still has to draw the lessons from Iraq, the new formations are dominated by anti-U.S. and anti-Western countries with an expansive, if not aggressive, drive.
- Other nations envisage similar constructs, e.g. the “arc of nations from the Gulf to East Asia” suggested by India with an appeal to the UAE states.
- Mutual dependencies between some producers and customers are often considered as a stabilizer (a preferred German argument in view of Russia), but these trading relations are asymmetric and hardly constrain the producing state in a highly competitive or hostile situation.

Some producing countries, i.p., the UAE states, are creating second-order dependencies through strategic investment policies which can both ensure protective interests of third parties and reduce the coercive power of non-cooperative customer states.

- Bilateralism in energy diplomacy is rapidly becoming a critically important tool in order to secure long-term supply commitments (e.g., China vis-à-vis Kazakhstan, the GCC states Iran, Sudan, Nigeria et al.), to escape U.S. restraints (e.g. Iran vis-à-vis Saudi-Arabia, Venezuela, et al.) or to balance dominant U.S. influence (e.g. Saudi-Arabia and other GCC states vis-à-vis India, China, even Iran, et al.)
- There still exist contested assumed or confirmed resources, e.g., the Barents Sea (Russia/Norway), the northern polar region (Russia, United States, Canada, Denmark), the Aegean (Greece/Turkey), etc., that could invite open conflicts.

All in all a new type of hostile trade between major producers and customers is unfolding which may work, but under delicate and possibly worsening conditions.

- Some major energy producers thus engage in balancing games (e.g. Saudi-Arabia), challenging games (e.g. Venezuela), or power games (Russia).

Reliance on flexibility in supplies thus increases, but with diminishing steering power. This basic uncertainty is exacerbated by the chances that political conditions for secure oil and gas supply

can change at short notices. The shock of 1979 is a vivid case in point. The evolving fabric of oil and gas trading with its increasingly competitive, if not hostile, characteristics tends accelerate these geopolitical developments.

The ever widening gap between demands and supplies is reinforcing the ongoing competitions over energy without prospects for structural solutions before options like possibly fusion technology begin to work.

Even without violence and conflict, unfavorable geopolitical changes in the global structures for oil and gas supply can change both the secure supply and regional, if not global, power structures. As a result, an increasing number of players is opting for niche strategies which renders coordination of supply even more cumbersome.

## Changing Political-Strategic Environments for Energy Security

The bottom-up approach for new energy trading patterns needs to be supplemented by a top-down approach for new power structures:

- Current and future global players;
- Major suppliers of oil and/or gas without own protection and likely to be drawn into global power struggles;
- Additional suppliers of oil and/or gas and critical transit states;
- Formations/alignments of suppliers of oil and/or gas that share some commitments towards global powers, be it as antagonist or protector; and,
- Networks with commitments to violence and with or without back-ups by states with military potential.

This complex structure of oil and gas supplies needs indeed to be understood within the changing global framework of evolving power structures: Competitions over future oil and gas supplies are shaped by profound changes of power structures and are themselves a major, if not the most pivotal, determining driver in this evolution, the outcome of which is certainly hard to predict. In fact, in case confrontational policies and postures tend to dominate this evolution, it is most likely to be the result of competitions over oil and gas supplies.

The bipolar deterrence system ended with the end of the Cold War, and it has not been replaced by an effective security mechanism. In fact, control of nuclear weapons has itself become more delicate in view of:

- The shaky situation of nuclear-armed Pakistan;
- An increasingly cornered and self-isolated Israel;
- Acceptance of the Indian nuclear weapon-state status;
- An uncertain North-Korean predicament within a competitive East Asian ensemble of actual and potential nuclear weapons-states;
- The Iranian nuclear gamble,;
- The beginning reverberations in kind among the GCC states; and,
- An increasingly unrestrained Russian military policy (even though at present primarily aiming at enhancing domestic stability).

In this vein, the U.S. posture is characterized by

- Incoherent efforts to restore effective control over nuclear weapons in the emerging new strategic environment;
- A highly assertive use of military power; and,

- Considerable uncertainty over future leverage and political backing of military power in critical areas, i.p., the Gulf, Africa, the Caspian Sea, the critical choke-points, and not least importantly within the South American hemisphere where U.S. dependence on oil imports combines with straight-forwardly aggressive policies toward the United States, above all on the part of Venezuela.

Most importantly, the shared strategic interest on the part of the main antagonists—the United States and the USSR—has receded, to say the least.

Today's evolving power struggle is over economic power, influence, and resources; and control over energy supplies is a central element of this competition, however increasingly backed up by competing military capabilities. Given the incentives and potentials for conflict, it is a relevant hypothesis for policy planners that competition over energy supplies will lead to major, if not global, conflicts with critical military dimensions, even if none of the global players is committed to such a course of events.

To develop a framework for relating the evolving trading patterns and the evolving power structures, it is suggested to supplement a bottom-up approach for new energy trading patterns by a top-down approach for new power structures:

- Current and future global players;
- Major suppliers of oil and/or gas without own protection and likely to be drawn into global power struggles;
- Additional suppliers of oil and/or gas and critical transit states;
- Formations/alignments of suppliers of oil and/or gas that share some commitments towards global powers, be it as antagonist or protector; and,
- Networks with commitments to violence and with or without back-ups by states with military potential.

Changes in the global and regional supply systems are almost certain to come eventually. The risks involved differ from level to level. It is important not to distinguish these four levels:

- Vulnerabilities of the supply chain: They offer disruptive opportunities to hostile actors along with the risks of insufficient infrastructures, mismanagement, and mishaps. Strategic consequences will require complex attack preparations.
- Terrorist and piracy incidents: Can have considerable impact as part of larger campaigns, but mostly in terms of local disruption plus political attention.
- Non-state campaigns like economic *jihad* which aim at major systemic disruption.
- Geopolitical risks, i.e., actual or potential state level conflicts with a critical energy dimension.

Changing geo-strategic environments for energy supply are most importantly affected by changing power relations between global players:

- The United States is massively dependent on oil and gas imports, but is seeking to reduce this dependence and to increase its share of friendly imports (Canada).
- It is experiencing the limited applicability of dominant military power and even its counterproductive political effects.
- It seeks to exercise maximum control of global oil and gas resources in the Gulf region (protection of Arab and restrictions on Iranian resources), in the Caspian region (though with increasing opposition from regional players as well as Russia and China), along the Indian Ocean (see the Malabar 07-02 naval exercise with the United States, Japan, Australia, India and Singapore in the Gulf of Bengal that may turn into a military alliance

- to control sea-lanes to East Asia and could become a counterpart to the SOC), in Africa (new AFRICOM), and in Latin America.
- Except for Canada and Norway, no unambiguous strategic consensus exists between the United States and major producers. Instead, increasing diversification of protective interests and commitments and increasing challenges to U.S. control with trends towards new anti-American alignments (including trans-continental coalitions) are unfolding.
  - Russia is openly seeking to use its sole-source leverage to re-establish itself as a global power. However, its military potential could at the best neutralize or complicate U.S. military protective operations.
  - Russia's increasing assertive political and military posture is backed by its gas and oil exports. Its global aspirations are currently aiming at strengthening domestic coherence and stability, but they could again develop into a global power game. However, Russia so far fails to translate its energy-gains into economic and social development at home, and its political access to external oil and gas richness is limited even in the Caspian regions, even though projects like the Gas OPEC and armament support to Venezuela display at least traditional Russian efforts towards power projection.
  - The most likely victim of more aggressive Russian energy export strategies would be Europe, and unlike during the Cold War, the United States is much less likely to be able or even willing to protect Europe against such contingencies.
  - China is a very different case: While Russia seeks to regain power, China has re-entered the global scene. It is more assertive and less constrained in its dealing with suppliers. Unlike Russia it also has a long-term political strategy which is backed by an increasingly strong economic base and, more slowly, by military power to back-up its energy-oriented global policies, although the steep increase in energy demand poses problems which China still seeks to reconcile with long-term objectives. It seeks supporting networks to secure energy supplies (in Africa, the Caspian region, cautiously even in the Gulf region). However, unlike Russia, its dependence on energy imports exists and tends to increase. And for a long time to come its dependence on oil and gas imports will be threatened by unmatched U.S. military power along the Indian Ocean lines and beyond.
  - New alignments that could serve to reduce U.S. leverage like the SOC are therefore acquiring an increasing importance, the envisaged pipeline from Iran and long-term deals with U.S. allies like Saudi Arabia at least help to diversify their dependence on the United States.
  - India, Japan, Europe and Brazil deserve special comments that are outside this presentation.

During the Cold War the United States and the USSR were locked into a stalemate and could not be seriously challenged by third parties. Their strategic and political relationship could only be changed by political changes in critical regions where both global powers were directly committed. It happened to be above all Central Europe and Germany. Energy was not an issue. When the European division was ended, the United States turned temporarily into an unchallenged sole global player.

In today's evolving constellation of global players energy, above all oil and gas, became a key driver:

- Power relations between global players will not primarily be determined by direct force relations, and economic competitiveness is too complex to allow measurements of respective global power.
- The most likely changes in global power relations would result from changes in how major supplier states develop and line up with global players. E.g., if GCC states undergo profound political changes like in Iran it would provide them with both own leverage and the option to influence—however undesirable—the strategic relations between global players.



- This is a mid- to long-term problem, but the likelihood that political structures within the strategic ellipse between the Barents Sea and the Indian Ocean will by and large stay as they are is extremely low.
- This pertains above all to the Gulf and the Caspian region, and all of the global players, on top China and Russia, and of the regional supplier states are fully aware.

Changing relations between global players and major regional suppliers can have secular implications:

- They could result from strategic policies of global players, e.g., an eventual U.S.-Iranian rapprochement or an increasing Chinese penetration of the Gulf and Africa.
- They could also result from internal changes within major supplier states like the GCC states, on top Saudi Arabia.
- Any such change will affect vital interests of the respective losers. No mechanism does exist yet that could serve to mitigate such strategic conflicts, and prospects for continued changes could instead exacerbate such contests.
- This is even more precarious if global players anticipate such a conflict and increasingly prepare for it. However, global players will be very reluctant to engage in direct military confrontations. Their relations can be critically affected by changes on the part of major supplier states and their role in global competitions.
- Since none of the supplier states (with the exception of Russia) is self-sustained and all need protection, coalitions of suppliers, transit states, and client-oriented networks like al-Qaeda become ever more important (after all al-Qaeda developed in response to first a Russian, and then above all, a U.S. military presence).
- For the time being, no mechanism for mitigation exists. Changes within and among major suppliers will be driven also by factors (e.g., sectarian) that are beyond the reach of global players. But given the criticality of oil and gas suppliers, the escalatory potential is there. Horizontal escalations are plausible in view of other (including smaller) suppliers, transit states, regional players like Egypt, and last, but not least, terrorist networks like al-Qaeda.

For a long time to come this seems to be the only kind of scenario for a new globalization of conflicts, albeit it could easily combine with additional critical drivers like changing control of nuclear weapons (e.g., in Pakistan). Susceptibility to terrorism and similar threats like piracy, sabotage, etc., can intensify such trends, because these are likely to fall in line with such changing power relations.

Judging the global players in terms of dependencies, competitiveness, alignments, and military readiness it is obvious that all players are beset with strategic problems that limit their global reach and control of energy resources:

- The United States can improve its national position over time, but at the expense of its protection of allies and with decreasing applicability of military power.
- Russia can continue to consolidate its power base backed by its oil and gas resources, but tends to fail as a global economic power and to acquire military leverage to fill the gaps. It is unlikely to penetrate oil- and gas-rich regions outside Russia except for possible major strategic mistakes of global competitors, in particular the United States (e.g., in view of Iran).
- China will become more competitive along with increasing dependence on energy imports. While China is currently searching for appropriate strategies, it will in the longer run be more successful than Russia (and probably at the expense of the United States) in establishing favorable energy-oriented alignments. It will also acquire considerably more economic leverage than Russia vis-à-vis the West. Its military strategic outreach will systematically increase, but will continue to fail balancing U.S. power projection

capabilities to secure supplies (except for drastic changes in U.S. global strategic policies).

The United States is not without constructive options like an eventual rapprochement with Iran, but short of that it will increasingly tend to fight an up-hill fight. Vast increases in monetary state reserves provide China, Russia and the GCC states with a new kind of leverage the economic and strategic criticality of which is still discomfortingly uncertain. Given that the United States is exceptionally indebted to China and the GCC states, the United States faces potentially vital threats to the foundation of its global power position, whereas shifting financial markets in favor of the Euro or eventually Islamic banking tend to put Europe and others more into the forefront: The United States may face a mix of energy, monetary, economic and strategic challenges.

Contested energy supply will be the main driver, although in the absence of counter-veiling policies the other trends may increasingly take on a life of their own—with each presenting challenges Europe is far from having the policies, means and alignments to cope with.

China, Russia, India, and to a degree the United States pursue long-term comprehensive policies to mitigate the challenges to secure energy supply, to which Europe will need to respond. Like Japan, Europe is only beginning to envisage strategic energy futures and its options are limited—not least importantly because the leading European powers have widely different energy policies as well as strategic policies. It is far from recognizing the complex structure of future energy security in terms of:

- Vulnerabilities of the existing oil and gas supply system to intended disruptions;
- Changing trading patterns and their strategic implications; and,
- The changing political-strategic global and regional environments for energy security.

Vulnerabilities can be reduced, but not eliminated. Terrorists and the like always have chances to find vulnerable points, although preparatory action can raise the thresholds for such activities.

Major hostile campaigns require more complex strategic planning and execution, but in instable political environments their chances and likelihood will increase (e.g., the presence of al -Qaeda in the back of Algeria and Morocco could turn into a serious predicament).

Geopolitical risks are the most difficult risks to integrate into a framework for secure energy supply. From European perspectives this is more difficult still because Europe has not so far developed a strategic perspective. Its vulnerability to terrorism is increasingly recognized even though remedies are still far from adequate. Its susceptibility to changing trading patterns and even more to changing geostrategic environments is serious and tends to grow although so far Europe is only marginally involved in critical conflict areas.

If current trends within the European Union continue, energy supply with its economic, strategic, and political implications will soon become the most divisive issue in European affairs, even if a sectoral EU energy policy will emerge and begin to downplay currently dominant national approaches. On the other hand, increasing political recognition of the full complexity of the challenges future energy supply is posing to Europe may offer a chance to turn future energy supply into the organizing concept for the European Union. However, the EU partners would need to define their strategic objectives within a global framework, and with a shared understanding that failure to pursue an increasingly common strategy will leave no member unhurt.

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